

# SYE8001M: COMPREHENSIVE STUDIES

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## Effective Term

Semester A 2025/26

## Part I Course Overview

### Course Title

Comprehensive Studies

### Subject Code

SYE - Systems Engineering

### Course Number

8001M

### Academic Unit

Systems Engineering (SYE)

### College/School

College of Engineering (EG)

### Course Duration

Non-standard Duration

### Other Course Duration

normally 2 semesters (or 1 semester plus 1 summer term)

### Credit Units

0-2

### Level

R8 - Research Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Nil

### Precursors

Nil

### Equivalent Courses

SEEM8001 Comprehensive Studies/ SEEM8001M Comprehensive Studies (offered until 2021/22) / ADSE8001 Comprehensive Studies/ ADSE8001M Comprehensive Studies (offered until 2023/24)

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

The aim of the course is to broaden and deepen the student's knowledge and understanding of a specified subject area or topic considered to be relevant to the MPhil/PhD student's area of research.

The course objectives are:

- to provide a framework for an MPhil/PhD postgraduate student to undertake and to a prescribed programme of studies of a specified subject area or topic;
- to develop and further a postgraduate student's knowledge and understanding of that subject area or topic which is regarded to be essential to his/her research;
- to cater for the student's coursework needs which cannot be met by available courses.

### Course Intended Learning Outcomes (CILOs)

| CILOs |                                                                                                                                  | Weighting (if app.) | DEC-A1 | DEC-A2 | DEC-A3 |
|-------|----------------------------------------------------------------------------------------------------------------------------------|---------------------|--------|--------|--------|
| 1     | Identify and define the issues of significance and scope of the given subject area or topic in explicit terms.                   | 20                  | x      |        |        |
| 2     | Review and critique the body of knowledge from literature of the given subject area or topic.                                    | 20                  | x      |        |        |
| 3     | Apply such theory or knowledge to lay the foundation or formulate the research methodology for the main research undertaken.     | 30                  | x      | x      |        |
| 4     | Communicate the results and achievements of this directed studies scholarly and logically, using written, oral and visual media. | 30                  | x      |        |        |

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Learning and Teaching Activities (LTAs)

| LTAs |                     | Brief Description                                                                                                | CILO No. | Hours/week (if applicable) |
|------|---------------------|------------------------------------------------------------------------------------------------------------------|----------|----------------------------|
| 1    | Independent studies | Student is expected to carry out independent research and literature studies on the given subject area or topic. | 1, 2, 3  | 39 hours/sem               |

|   |                     |                                                                                                                                                                                                                                                                                            |            |              |
|---|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|
| 2 | Group Discussion    | Some group discussion sections are provided as a peer-learning platform for students to share their learning experience and discuss their questions.                                                                                                                                       | 1, 2, 4    | 39 hours/sem |
| 3 | Supervised learning | Each student has regular meetings with their supervisor. In the meeting, the supervisor discusses with the student on his/her progress, issues and findings, and offer advice to him/her. Students are required to give a presentation in the end of the course to present their findings. | 1, 2, 3, 4 | 39 hours/sem |

**Assessment Tasks / Activities (ATs)**

| ATs |                         | CILO No.   | Weighting (%) | Remarks ("- " for nil entry) | Allow Use of GenAI? |
|-----|-------------------------|------------|---------------|------------------------------|---------------------|
| 1   | Report and presentation | 1, 2, 3, 4 | 100           | -                            | No                  |

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Minimum Continuous Assessment Passing Requirement (%)**

30

**Minimum Examination Passing Requirement (%)**

0

**Assessment Rubrics (AR)****Assessment Task**

Report and presentation (for students admitted before Semester A 2022/23 and in Semester A 2024/25 &amp; thereafter)

**Criterion**

Understanding the research topic with analysis of literature review. Clear presentation and communication.

**Excellent**

(A+, A, A-) High

**Good**

(B+, B, B-) Significant

**Fair**

(C+, C, C-) Moderate

**Marginal**

(D) Basic

**Failure**

(F) Not even reaching marginal levels

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**Assessment Task**

Report and presentation (for students admitted from Semester A 2022/23 to Summer Term 2024)

**Criterion**

Understanding the research topic with analysis of literature review. Clear presentation and communication.

**Excellent**

(A+, A, A-) Excellent

**Good**

(B+, B) Good

**Marginal**

(B-, C+, C) Marginal

**Failure**

(F) Failure

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**Additional Information for AR**

The assessment method(s) shall be designed and proposed by the student's Supervisor and the Qualifying Panel.

The following assessment method(s) may be adopted:

- coursework and written examination; or
- coursework and oral presentation/examination; or
- combination of all of the above.

Pass or Fail

**Part III Other Information**

**Keyword Syllabus**

The specific syllabus or content requirement for this course is to be designed by the postgraduate students' supervisor(s).

The assignments and directed readings will be mainly but not exclusively based on his/her area of research.

Typically, student will be expected under the guidance of supervisor, conduct in depth review of relevant literature; critique the existing body of knowledge and lay the necessary foundation for the proposed research; conduct preliminary data gathering and analysis or case studies; preparation and presentation of the report; and dissemination of the findings and application in the context concerned.

Supervisor is expected to provide a written outline of the content requirement and assessment methods when prescribing this course.

**Reading List**

**Compulsory Readings**

| Title |     |
|-------|-----|
| 1     | NIL |

**Additional Readings**

| Title |     |
|-------|-----|
| 1     | NIL |